Portable Radio Solutions

Scott Honaker, N7SS

Define the objectives

- Capabilities vs. size and weight
- Ease of deployment and use
- Robust design
  - Will it withstand rough handling/weather
- Clever/fun features
- Professional appearance and layout

Let’s look at the elements

- Radios and accessories
- Cases/enclosures
- Power supply and distribution
- Antenna systems

Radios and accessories

- VHF/UHF
- HF + antenna tuner
- TNC or sound card adapter
- D-STAR capability
- Laptop/netbook
- Coaxes, adapters, headset, pens/pencils, notepads, forms, manuals

Cases and enclosure options

- Pelican/Stormcases
- Portable music rack-style cases
- Ammo cans/ANVIS case
- Dry boxes
- Plastic tubs
- Toolboxes
- Video game cases

Pelican/StormCase

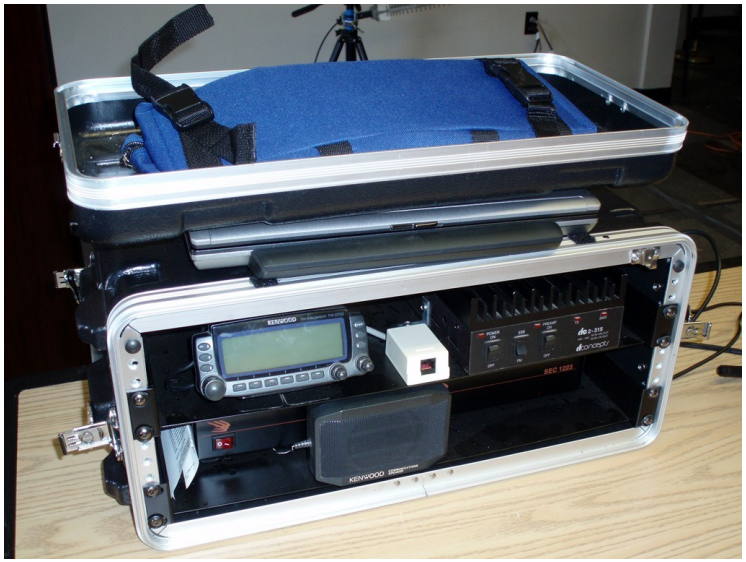
- Rugged Plastic
- Expensive
- Locking, Watertight
- Open on top

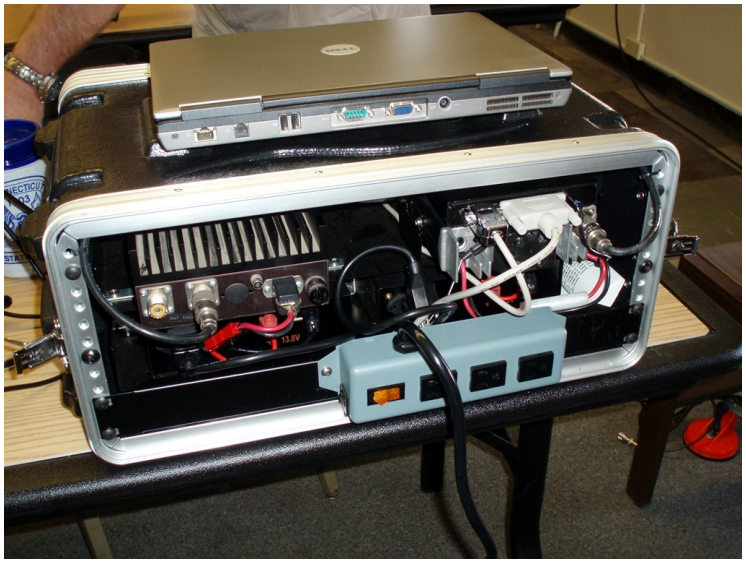
Portable music rack cases

- From SKB, Gator, GRC, Eurolite, TKL, etc.
- 19” wide x ~2 inch “Rack Units”
- Rugged – Vinyl over wood or plastic
- Moderate price
- Available with shock mounting
- Rack rails available separately

Music cases

NR7SS
D-STAR
D-STAR
440.325/445.325
D-STAR


KENWOOD
KENWOOD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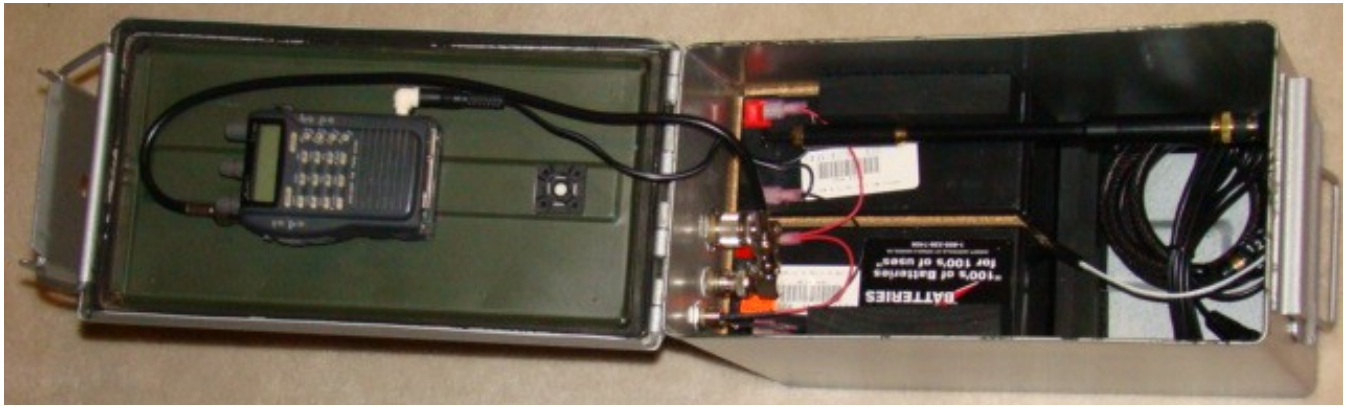
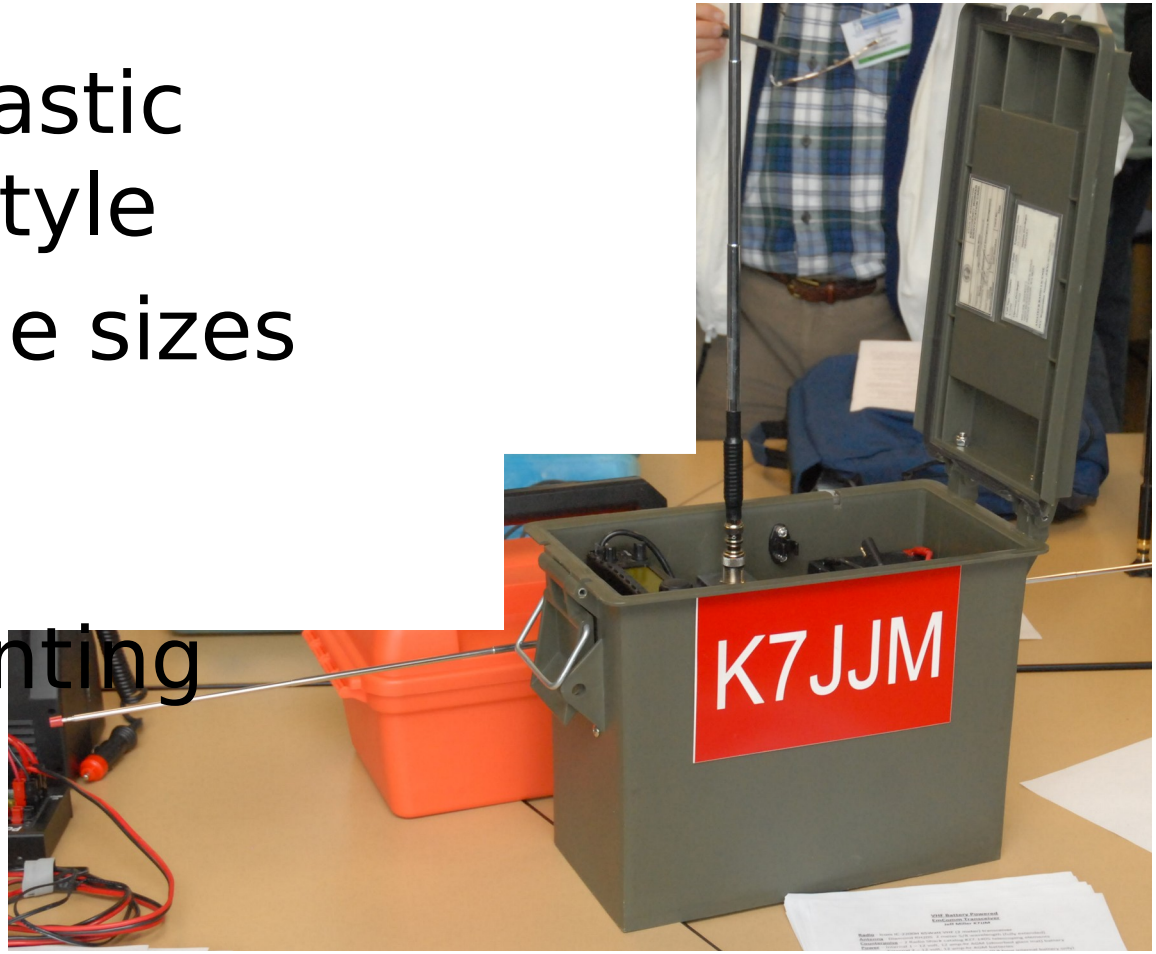
Ammo can/ANVIS case

- Ammo cans are limited in size, heavy with uncomfortable handles
- Both are metal, rugged and gasketed



Drybox

- Gasketed plastic ammo can style
- Only a couple sizes
- Lightweight, rugged, limited mounting options



Plastic tubs

- Unlimited varieties/sizes
- Generally not as rugged or weatherproof
- Inexpensive
- Complicated mountin

Toolboxes

- Plastic boxes are tapere
- Metal provides simpler mounting

More Toolboxes

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Video game cases

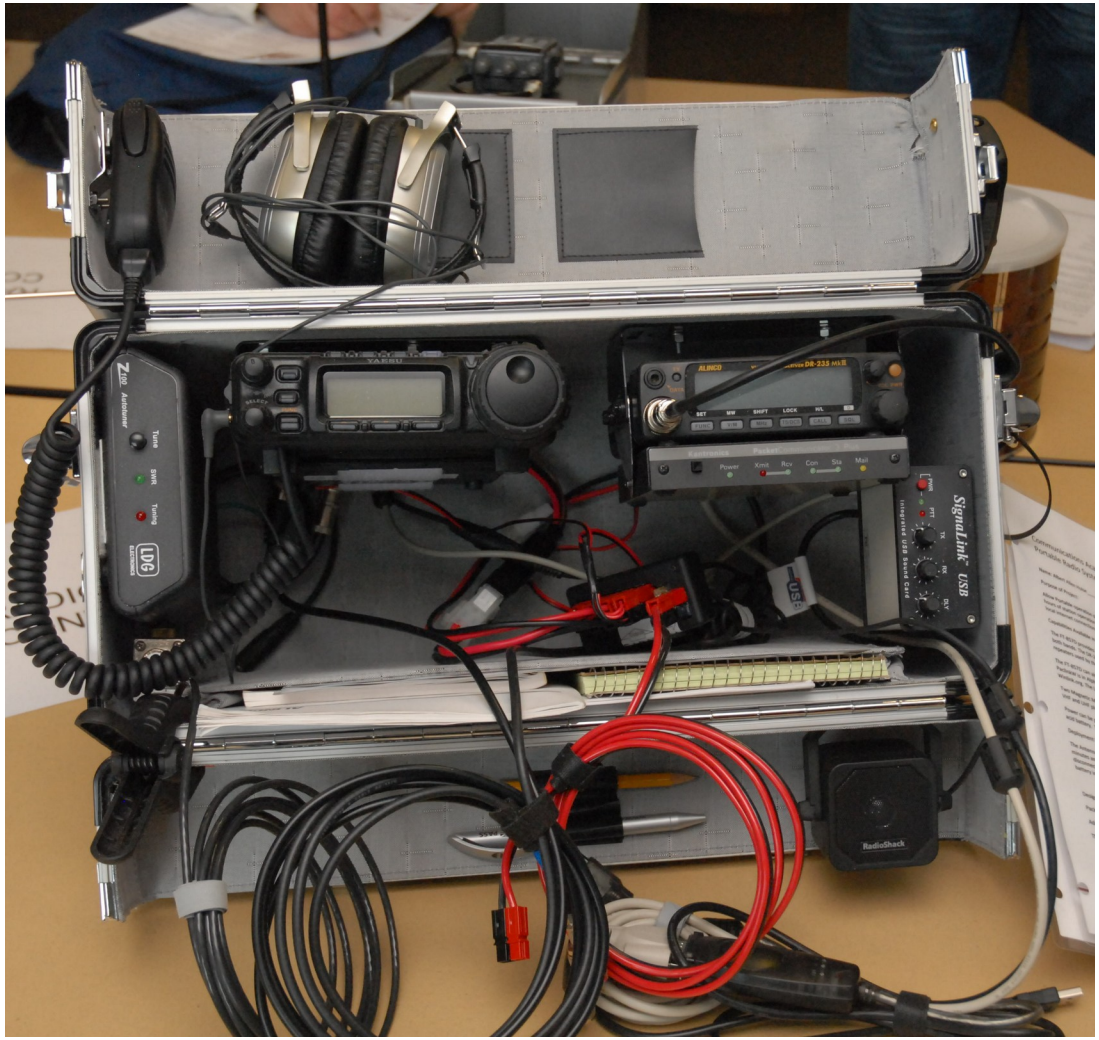
- Storage for game and controllers
- Most are top-opening
- Softcases available

Tactical Cases

- TAC-COMM TRC-1

- iPortable Rack System

More Cases



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Power supplies

- Switching supplies are compact
- Available from Astron, Samlex, Alinco, Jetstream, Gamma Research and MFJ
- Can be noisy on HF
- Extras include meters, additional power outlets, adjustable voltage

Power Supplies

Power distribution

- West Mountain Radio Rigrunners are ideal
- Other Anderson Powerpole options
- Fuse blocks available (marine versions are best)
- Barrier strips can also be used (be aware of inadvertent contact – no insulation)

Powerpoles

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VHF/UHF Antennas

- Mag mount verticals
- Larsen BSA kit
- Small yagis/quads
- Mast material, guys, tripod, shims, bungee cords

HF Antennas

- Wire dipoles, windom or G5RV
- Buddipole with tripod, mast, guys
- Verticals - Superantennas MP-1, hamstick or screwdriver **with ground radials**